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## Habitat management for

# HAWKS



In Kansas, there are 23 species of the Order *Falconiformes* which includes the families of vultures (*Cathartidae*); kites, hawks, and eagles (*Accipitridae*); ospreys (*Pandionidae*); and falcons (*Falconidae*). Of these 23 species, 15 are common inhabitants, 5 occur occasionally, and 3 are rare visitors.

Most of the above families are commonly called hawks. There is, however, no species correctly known as "chicken hawk."

Hawks "birds of prey" are generally misunderstood and not appreciated for their beneficial values. The hawks have been persecuted because they occasionally harm or kill game birds and poultry. They have been reduced in numbers because of this habit.

### VALUE

Hawks are primarily flesh eaters and generally consume little plant material. They perform a valuable service to farmers, ranchers, and sportsmen by eating rats, mice, ground squirrels, and insects which affect crop production and compete with game birds for food. Some hawks and the vultures serve as scavengers by removing dead animals from roads and fields. In addition to the economic benefit from the control of rodents, there is increasing aesthetic value of simply watching hawks as they soar in the air or dive after their prey. This aesthetic value is an intangible asset which is impossible to evaluate in dollars but is increasingly important to a large number of individuals who participate in nonconsumptive uses of wildlife.

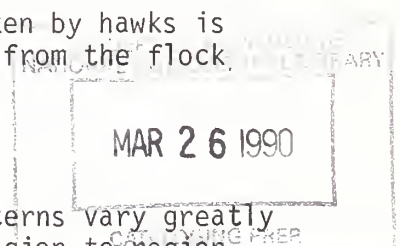
Most sportsmen realize that the number of game birds taken by hawks is negligible. Removal of diseased or crippled game birds from the flock is actually beneficial.

### IDENTIFICATION

Hawks are quite often difficult to identify. Color patterns vary greatly within some species, age groups, seasonally, and from region to region. Males and females are usually colored alike with females being larger than males. Immature or juvenile eagles take two to three years to achieve their adult plumage; and identification of juveniles as in most birds is generally difficult. Color variations are common among individuals of most buteo species and can range from light colors to almost black. The major groups or families can be distinguished by shape and size.

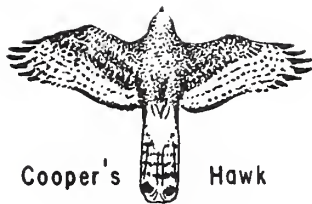
USDA-Soil Conservation Service, Salina, Kansas

June 1979



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Cooper's Hawk

**Accipiters**



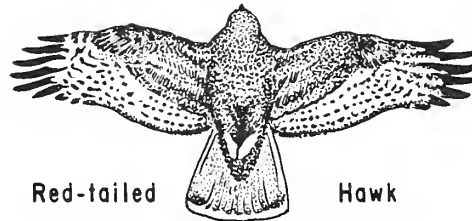
American Kestrel

**Falcons**



Mississippi Kite

**Kites**

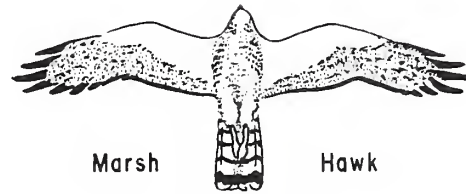


Red-tailed Hawk

**Buteos**



**Osprey**



Marsh Hawk

**Harriers**

*Accipiters* are long tailed, intermediate-sized hawks with short, broad, rounded wings. These hawks of the forest or wooded areas feed mainly on small and medium-sized birds, although some mammals such as rabbits and mice are taken. Accipiters in Kansas include the goshawk, Cooper's, and sharp-shinned hawk. These three hawks vary greatly in size with the goshawk being the largest and the sharp-shinned being the smallest. Their flight is usually characterized by rapid short wing beats interrupted by short periods of glide. Accipiters nest in isolated riparian or other timbered areas.

*Falcons* are medium and small-sized, swift, powerful birds with long pointed wings, large heads, and long tails which narrow at the tip. Kansas members of this group are the prairie and peregrine falcons which have wingspans of around 40 inches and the Merlin and American kestrel (pigeon and sparrow hawks) which have wingspans from 20 to 24 inches.

The American kestrel preys primarily on insects while the other falcons prefer a diet of small birds and mice. The American kestrel nests in old woodpecker holes, natural cavities, and bird boxes, while the other falcons prefer inaccessible cliffs or trees. Most falcon flight patterns are rapid with direct choppy motions, and they rarely soar. The American kestrel frequently hovers and hunts from power lines, poles, and trees.

The peregrine falcon is on the state and federal endangered species lists. The prairie falcon is on the state list of threatened species.

*Kites* are medium-sized, streamlined, graceful hawks with long, pointed wings and long tails which are usually squared at the tips. The Mississippi and swallow-tailed kites occur in Kansas. The distinguishing characteristic of the Mississippi kite is the black unbarred tail. The kites feed chiefly on insects, reptiles, and small mammals. They usually nest in a tree adjacent to open country, or in open city parks.

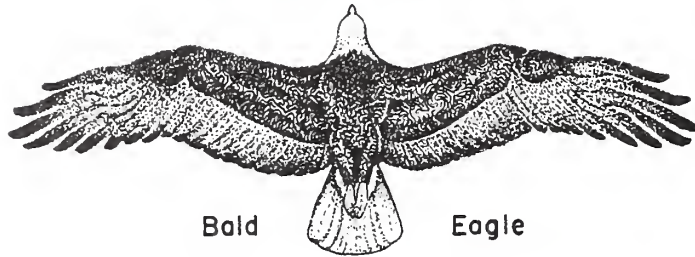
Kites have a swift flight motion and soar a great deal of the time. They slip down feet first when attacking their prey rather than diving like other hawks. Kites hover a great deal of the time while they are hunting.

*Buteos* are large-bodied, broad-winged hawks with fan-shaped tails. They have wingspans which range from 33 to 54 inches. This group of Kansas hawks includes the rough-legged, ferruginous, red-tailed, red-shouldered, Swainson's, broad-winged, Harlan's, and Harris' hawks. They are usually seen in open country, soaring on air currents, and circling overhead. Buteos drop upon their prey in a steep dive. They are almost wholly beneficial, in that they live on small mammals such as mice, gophers, and rats, large insects, and small reptiles. They rarely catch healthy birds. Most buteos nest on a bulky platform of sticks in a tree or isolated ledge. They usually migrate in flocks and tend to follow ridges or high areas during their migration.

The *Osprey* is a large hawk with long wings which are crooked in appearance. The wings have a black wrist mark near the crook. The osprey is larger than the buteo hawks but smaller than an eagle. The osprey is an uncommon inhabitant in Kansas. It feeds entirely on fish which it catches by plunging into the water. The wing beat is slow and full and the wings are usually held in an arched position. All available species of fish are taken for food but nongame or rough fish usually comprise the greatest percentage of the catch. The nest is a platform of sticks lined with soft material and is most often placed on an isolated dead tree, cliff, or structure such as a telephone pole. Ospreys usually use the same nest for many years.

*Harriers* are medium, slender hawks with long, slim, semi-rounded wings and long tails. The only harrier occurring in Kansas is the marsh hawk. The marsh hawk is easily recognized by its large, white rump patch. While hunting, they usually glide a few feet off the ground over grassland, fields, and marshes. Marsh hawks feed primarily on mice and ground squirrels. The female marsh hawk is brown and noticeably larger than the male. She builds a shallow nest of grass and twigs on the ground in grassland. The adult male is steel gray, while the immature birds resemble a dark plumaged female.





Bald Eagle

*Eagles* and hawks, although somewhat different in appearance, are members of the same family (*Accipitridae*). Eagles are very large, long winged (78"-80"), dark colored birds with a beak nearly as long as their heads. Both bald and golden eagles occur in Kansas. The golden eagle is a year-round resident and the bald is a winter resident. Both eagles have dark brown body plumage. Adult bald eagles can be recognized by their white head and tail plumage. Bald eagles younger than three years do not have white heads and tails. The golden eagle is a medium golden brown while the bald eagle is a very dark brown, appearing black. The golden eagle feeds mainly on rodents and small mammals while the bald eagle's chief food is fish. The bald eagle is listed as an endangered species in the United States and is protected by federal and state law. The golden eagle, although not endangered, is protected by federal and state law.

*Vultures* are very large, broad long-winged (72"), blackish colored birds with relatively small naked heads. The turkey vulture is a common inhabitant of the state, but the black vulture is only a rare visitor to the southeast portion of Kansas. Vultures are often seen soaring in broad circles tilting from side to side in sharp movements. Its wings are held above the horizontal position while soaring. This elevated wing position is a distinguished characteristic from the flat or horizontal wing position of eagles. Vultures feed almost entirely on carrion or garbage. They nest in cavities in rock ledges, cliffs, and in hollow trees or abandoned buildings. Adult vultures have a red head while immature birds have a black head.

#### HABITAT MANAGEMENT SUGGESTIONS

All members of the order (*Falconiformes*) provide some benefit to man. They are all protected by state and federal law.

1. Caution ranchers, farmers, hunters, and others not to shoot hawks.
2. Protect the nest sites of hawks. Most hawks use the same nest site each year.
3. Stress the beneficial economic values of hawks. Farm pests such as insects and mice are primary prey of hawks.
4. Preserve riparian woodlands.

The Soil Conservation Service, local conservation districts, the Kansas Fish and Game Commission, and the Kansas State University Cooperative Extension Service offer competent guidance on soil, water, plants, and wildlife habitat management.